

# See There

## When You Can't Be There™

Meet our new dome-shaped, ceiling-mounted network camera with a fixed lens. It's easy to mount because all angle setting is done while viewing the monitor. And power is supplied by Ethernet cable or AC adaptor (purchased separately). This makes it ideal for monitoring places where mounting and supplying power are difficult, such as near entrances, elevator doors, factories, and warehouses. It offers true Zero Distance Management that boosts business efficiency by letting you monitor essential locations anytime, from virtually anywhere.



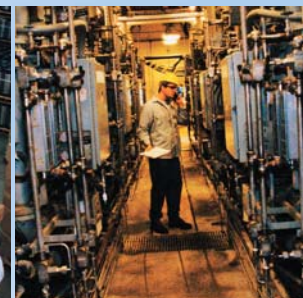
Entrances



Stores



Warehouses



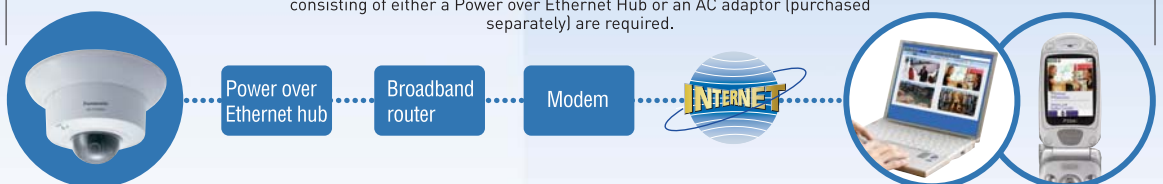
Factories

### Zero Distance Management

Zero Distance Management is a new business style made possible by Panasonic network cameras. It allows safe, smooth, economical business management that is totally free from conventional distance and time limitations.

### System Diagram

To use the BB-HCM403, Internet access equipment and a power supply consisting of either a Power over Ethernet Hub or an AC adaptor (purchased separately) are required.



# Versatile Functions Support Your Business Management



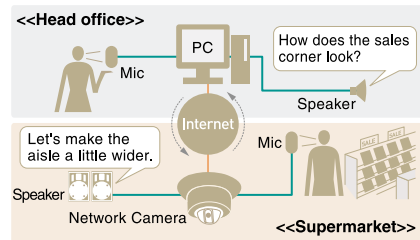
## STORE



### Solve Problems from Wherever You Are Audio 2-Way Communication\*1

By connecting the optional speaker, you can converse\*2 while viewing the monitor. This allows more precise communication without the inconvenience of being in a distant location. For example, you can accurately troubleshoot problems in a warehouse or factory, or give instructions for urgent store display changes.

\*1 The audio feature does not work on cell phones.  
\*2 Walkie-talkie type conversation.

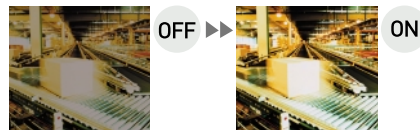


## FACTORY



### See Clearly Even in Dark Places CCD Sensor & Color Night View Mode

The BB-HCM403 camera automatically adjusts the image brightness for monitoring in dark, difficult-to-see places like dimly lit factories and warehouses at night. The BB-HCM403 provides effective security because it lets you monitor down to a brightness of only 0.2 lux.



## WAREHOUSE



### Save Time from Your Busy Schedule SD Memory Card\* Recording

By recording continuously in preset intervals, you can collect an entire day's worth of images for a quick and easy check. For example, using a 2-GB SD Memory Card with 1-minute recording intervals, you can record up to 80 days' worth (115,000 images). This is great for people who have to spend time away from the business site.

\*The SD Memory Card is sold separately. The camera supports 2-GB, 1-GB, 512-MB, 256-MB, 128-MB and 64-MB Panasonic SD Memory Cards.

#### Number of recording files per SD Memory Card (Image quality: Standard)

SD Memory Card	Resolution		
	640 x 480	320 x 240	160 x 120
2GB	Approx. 33KB/file	Approx. 16KB/file	Approx. 5KB/file
	Approx. 55,000 images	Approx. 115,000 images	Approx. 370,000 images
1GB	Approx. 28,000 images	Approx. 58,000 images	Approx. 180,000 images
	Approx. 14,000 images	Approx. 29,000 images	Approx. 94,000 images

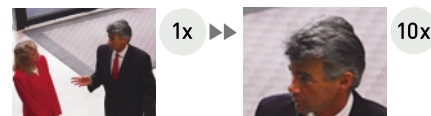
## ENTRANCE



### Check Even Small Objects in Detail 10x Digital Zoom Function\*

You can feel more secure because the zoom function gives you a clear view of objects that would be difficult to see with ordinary monitoring, like the face of a visitor walking through the door or the detailed conditions at the far back of a large factory.

\*This feature is not available when viewing on a cell phone.



## Other Features

### Motion Detection & Image Transfer Mode

The BB-HCM403 can start recording images as soon as it detects motion. Recorded images can also be sent by e-mail\* or transferred via FTP for remote confirmation.

\*POP before SMTP authentication and PLAIN and LOGIN SMTP authentication are supported. CRAM-MD5 SMTP authentication is not supported.

### IPsec Supported

In addition to authentication based on a conventional ID and password system, packet encryption is also used to bolster security and inhibit eavesdropping.

\*IPsec is an IP security protocol for data encryption standardized by IETF, an international community devoted to the standardization of Internet specifications.

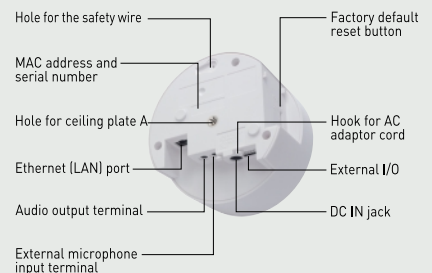
### Multi Camera Capability

Check the images from three sets of four cameras each, and converse with one camera site. Display them all at once (with no audio).

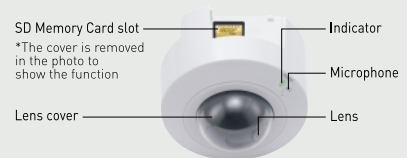


## Part Names

### Bottom View



### Front View



## Specifications [BB-HCM403]

Server	Network camera	Terminal
Video Compression	JPEG [3 levels]	Interface
Video Resolution	640 x 480, 320 x 240 [default], 160 x 120	10Base-T/100Base-TX Ethernet RJ-45 connector x 1
Image Quality	3 modes [favor clarity, standard, favor motion]	External I/O
Frame Rate*1	Max. 12 frames/second (640 x 480) Max. 30 frames/second (320 x 240 or 160 x 120)	External sensor input x 2, external sensor output x 1
Security	User ID/password/IPsec	External Microphone Input
Cipher Algorithm	DES-CBC, 3DES-CBC, AES-CBC	03.5 mm mini jack
IPsec Feature	ESP encryption, ESP authentication Transport mode/tunnel mode IKE [Internet Key Exchange]	Audio Output
Input Encoding Method	Encoding with ActiveX	03.5 mm stereo mini jack [but output is mono.]
IKE [Internet Key Exchange]	Pre-shared key	I/O connector for sensor
Supported Protocols	IPv4/IPv6 dual-stack IPv4: TCP, UDP, IP, HTTP, FTP, SMTP, DHCP, DNS, ARP, ICMP, POP3, NTP, UPnP, IPsec IPv6: TCP, UDP, IP, HTTP, FTP, SMTP, DNS, ICMPv6, POP3, NTP, NTP, IPsec	G GND 1 External sensor input G GND 2 External sensor input 3 External device control output 4 DC power output terminal [10.5_13.5 VDC]
User Access Limit	Max. 30 simultaneous accesses [max. 10 accesses with voice reception]	SD Memory Card Slot
Buffered Image*2	About 125 frames [320 x 240] with time display [when SD Memory Card is not inserted.]	2GB, 1GB, 512MB, 256MB, 128MB, 64MB
Message-Digest Algorithm	HMAC-MD5, HMAC-SHA-1	General
Message Transfer Condition	Alarm, timer or Motion Detection	Humidity
Image Transfer Method	SMTP*3, FTP	Operation: 0°C to +40°C [+32°F to +104°F] Storage: 0°C to +50°C [+32°F to +122°F]
		Terminal
		Operation: 20% to 80% [No Condensation] Storage: 20% to 90% [No Condensation]
		Dimension [H x W x D]
		97.5 x 123 x 123 mm [3 13/16 x 4 13/16 x 4 13/16 inches]
		Weight
		330g [0.73 lb.] [Only the unit]
		Power supply
		PoE: [48 V, IEEE802.3af-compliant Power over Ethernet], AC adaptor
		AC adaptor [Model No. BB-HCA2A: Option]
		Input: 120 V AC, 60 Hz output: 12 V DC, 0.75 A
		Consumption
		PoE: about 5.5 W, AC adaptor: about 5.8 W

\*1 Frame rate may slow down depending on the network environment, PC performance, image quality, SD memory recording, using IPsec or what object you view.  
\*2 The maximum number of frames changes depending on the image quality and what object you buffer.  
\*3 POP before SMTP authentication and SMTP authentication [PLAIN and LOGIN] are supported. SMTP authentication [CRAM-MD5] is not supported.  
\*4 Connect it to an amplifier or an external speaker with a built-in amplifier.

**Panasonic**

<http://panasonic.co.jp/pcc/products/en/netwkcaml/>

OM0706SP-HCM403-LT.US

All pictures simulated.

Design and specifications are subject to change without notice.

This unit is designed for use in the United States of America. Sales or use of this product in other countries may violate local laws.